



UNITED STATES PATENT AND TRADEMARK OFFICE

11/1

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,786	03/21/2006	Hans-Peter Miller	3590	3398

7590 01/28/2008
Striker Striker & Stenby
103 East Neck Road
Huntington, NY 11743

EXAMINER

MOK, ALEX W

ART UNIT	PAPER NUMBER
----------	--------------

2834

MAIL DATE	DELIVERY MODE
-----------	---------------

01/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,786	Applicant(s) MILLER ET AL.	
	Examiner Alex W. Mok	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/3/08.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connection plate and the mounting element must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because it does not show figure 5, which is disclosed in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 58 (page 7, lines 1,3, and the claims), 46 (page 5, line 22, and the claims), 49, 52 (in the claims). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki et al. (US Patent Application Pub. No.: US 2003/0127920 A1).

For claim 1, Yamazaki et al. disclose a regulator unit having a housing (see figure 3), in which the housing has a wiper contact mounting region with a guide and wiper contacts seated therein (reference numeral 121), having a regulator housing portion (reference numeral 122), in which an electronic controller unit and a regulator heat sink are received (reference numeral 127), having a plug element (reference numeral 126) for electrically connecting the regulator unit to external contact elements, and in which the regulator unit has a first through opening and a second through

opening (see figures 3 and 4, reference numeral 136), by means of which openings the regulator unit can be fastened to a housing (reference numeral 104) by means of two bolt elements (see figure 3), characterized in that the regulator heat sink is located between the wiper contact mounting region and the plug element (figure 3).

For claim 8, Yamazaki et al. illustrate the wiper contact mounting region with its guide, the regulator housing portion, and the plug element being integrally with one another a single housing part (see figure 3).

For claim 9, Yamazaki et al. illustrate a generator (figure 1), and the regulator unit fastened by means of two bolt elements to a rectifier heat sink and to a connection plate (reference numeral 136, see figures 3, 4).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4, 10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being¹ unpatentable over Yamazaki et al. (US Patent Application Pub. No.: US 2003/0127920 A1).

For claim 2, it would have been obvious to have the wiper contact mounting region located asymmetrically between the first through opening and the second

through opening, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

For claim 3, it would have been obvious to a person of ordinary skill to have spacing in between the guide and the first through opening, since Yamazaki et al. shows a spacing between these components (see figures 3, 4), and a person of ordinary skill would have been able to make the spacing 20 mm since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, and also this technique would enable more air flow and improve the cooling action.

For claim 4, it would have been obvious to have some sort of spacing in between the center line of the wiper contact mounting region and the first and second through openings, and also to have the ratio of these two spacings be between 5.2 and 6.0, since this would involve both rearranging the parts and discovering an optimum value for the spacing between the wiper contact mounting region and the first and second through openings, which are both held to involve only routine skill in the art, and having this kind of configuration would have been obvious for the purpose of improving the air flow for cooling.

For claim 10, Yamazaki et al. show a spacing from the center (i.e. axis of rotation) to the first through opening and to the second through opening (see figures 3, 4), and it would have been obvious to have one spacing be greater than the other by 5% to 10%, since this would involve a mere change in the location of the components,

which is held to be within the level of ordinary skill, the same reasons given for claim 2 above.

For claim 13, it would have been obvious to make the regulator housing portion have a spacing from the end plate in the direction of the axis of rotation of between 0.5 and 5 mm, and preferably between 1.8 and 3.2, since Yamazaki et al. already illustrate a spacing between the regular housing portion and the end plate (see figures 1, 3), and a person of ordinary skill would have been able to make the spacing between 0.5 and 5 mm for the purpose of providing proper fastening of the regulator unit.

For claim 14, since the reference of Yamazaki et al. already teach through openings and bolt elements, it would have been obvious to also use bearing points, since this involves a mere change in the shape of the through openings, where changing the shape involves only routine skill in the art, and a person of ordinary skill in the art would have been able to include this technique for the purpose of further securing the regulator unit.

8. Claims 5-7, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. as applied to claims 1, 9, and 10 above, and further in view of Kashihara et al. (US Patent No.: 6081054).

For claim 5, it would have been obvious to have an additional through opening on the regulator unit, since Kashihara et al. teach a regulator having additional through openings (see figure 1), and having the spacing between the openings be within 11 and 36 mm would have been obvious since it has been held that discovering an optimum

value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

For claim 6, since the references of Yamazaki et al. and Kashiwara et al. teach through openings, these openings would already have a surface for which a mounting element would make contact with (i.e. bearing face), and it would have been obvious to have these bearing faces spaced apart in the axial direction and have this spacing be 5 mm since it has been held to be within the general knowledge of a person of ordinary skill to rearrange parts of an invention, and having this configuration would enable better positioning for securing the regulator unit.

For claim 7, it would have been obvious to have wiper contact mounting region and the plug element located between the first through opening and the second through opening, since Kashiwara et al. already illustrate the wiper contact mounting region between the through openings (see figure 1), and a person of ordinary skill would have been able to have the plug element also located between the openings since rearranging parts of an invention involves only routine skill in the art, the same reasons given for claim 6 above, and this configuration would be obvious for improving the air flow through the regulator and across the heat sink.

For claims 11 and 12, it would have been obvious to modify the regulator of Yamazaki et al. to have a fastening point serve the purpose of contacting and fastening to a connection plate and be located between the first through opening and the axis of rotation, and to also have the fastening point be located in a corridor amounting to between +3 and -3 mm, since Kashiwara et al. illustrate a similar invention with

additional openings (i.e. fastening point), and a person of ordinary skill would have been able to rearrange the components so that the fastening point is between the first through opening and the axis of rotation and make the corridor within +3 to -3 mm for the purpose of better securing the regulator unit.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex W. Mok whose telephone number is (571) 272-9084. The examiner can normally be reached on 7:30-5:00 Eastern Time, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/572,786
Art Unit: 2834

Page 10

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alex W. Mok
Examiner
Art Unit 2834

AM

